

Murfreesboro Rover Comprehensive Operational Analysis

Public Meeting

November 14, 2017

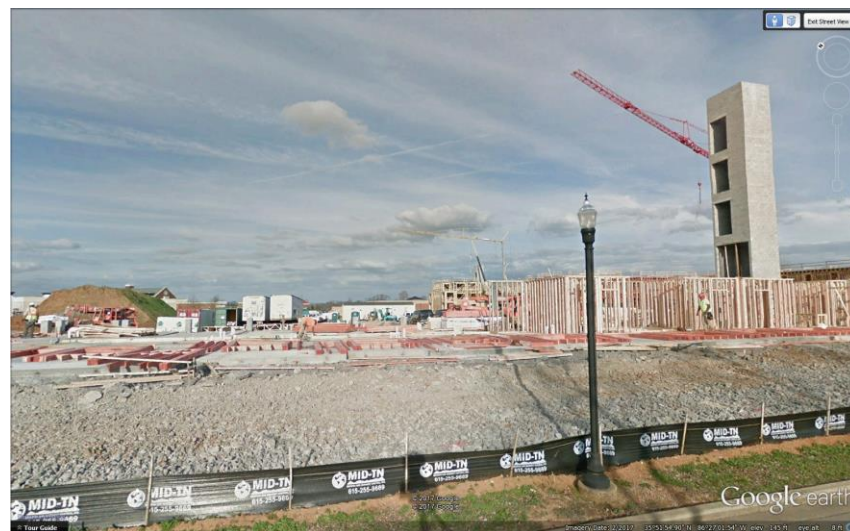
Thank you for joining us!

- Public Transit and Murfreesboro's Future
- Who Rides Rover Today?
- Future Opportunities
- What's Next for Rover?



Murfreesboro Today and Tomorrow

- Fastest growing city in Tennessee
- Tenth fastest growing in US
- 2017 Population: 132,379
- 2022 Projection: 144,942 (↑18%)
 - Nearly 200 new residents a month
- 2035 Projection: 228,000 (↑73%)
- 2045: 259,000 (↑96%)



Murfreesboro Today and Tomorrow

- Rutherford County employment
 - 2015: 155,000
 - 2025 projection: 187,000 (↑21%)
 - 2035: 226,500 (↑46%)



Murfreesboro Today and Tomorrow

- Traffic congestion is already occurring, with millions of square feet still to be developed.



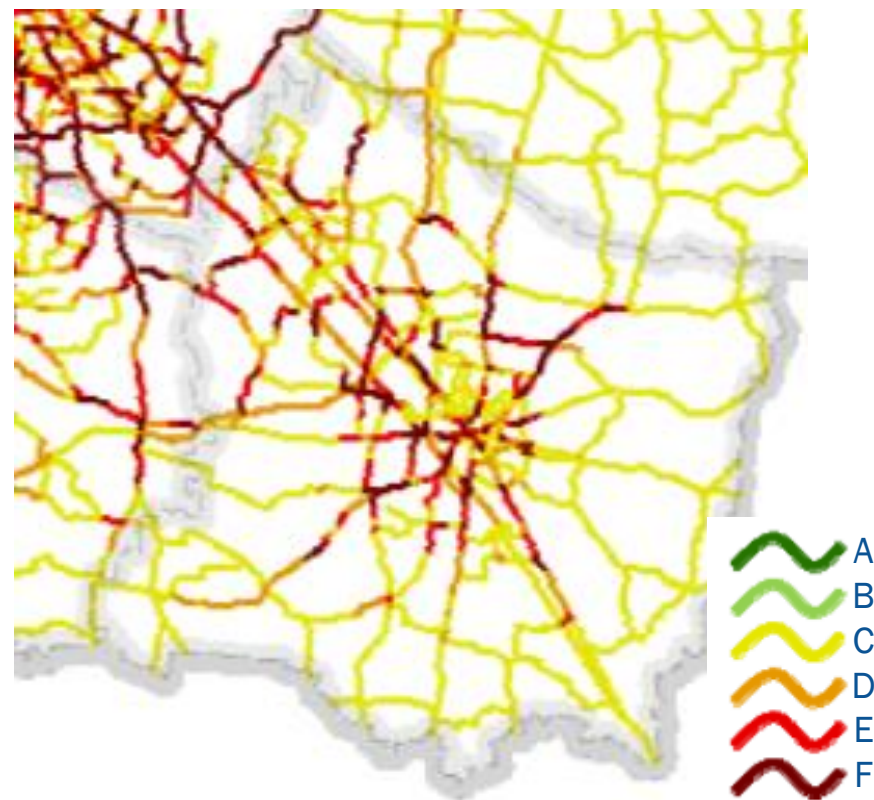
Murfreesboro Today and Tomorrow

- Traffic congestion is already occurring, with millions of square feet still to be developed.
- In 2010, very few Rutherford County roads were congested.



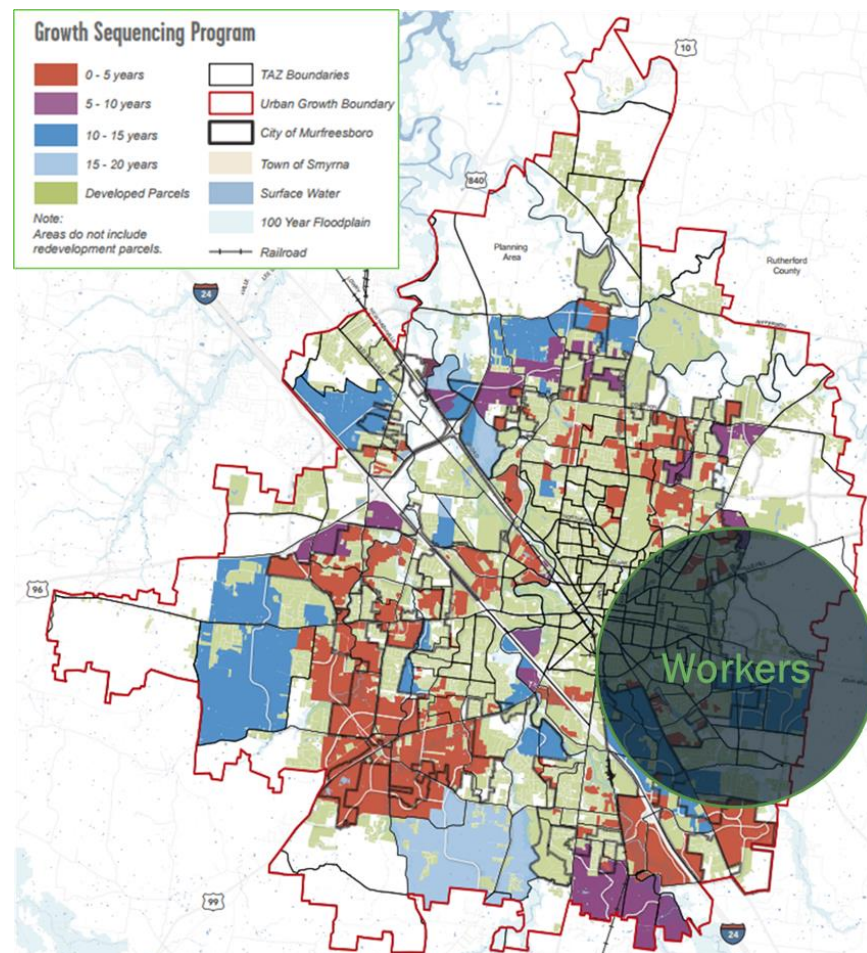
Murfreesboro Today and Tomorrow

- Traffic congestion is already occurring, with millions of square feet still to be developed.
- In 2010, very few Rutherford County roads were congested.
- By 2040, traffic congestion is projected to be a serious problem.



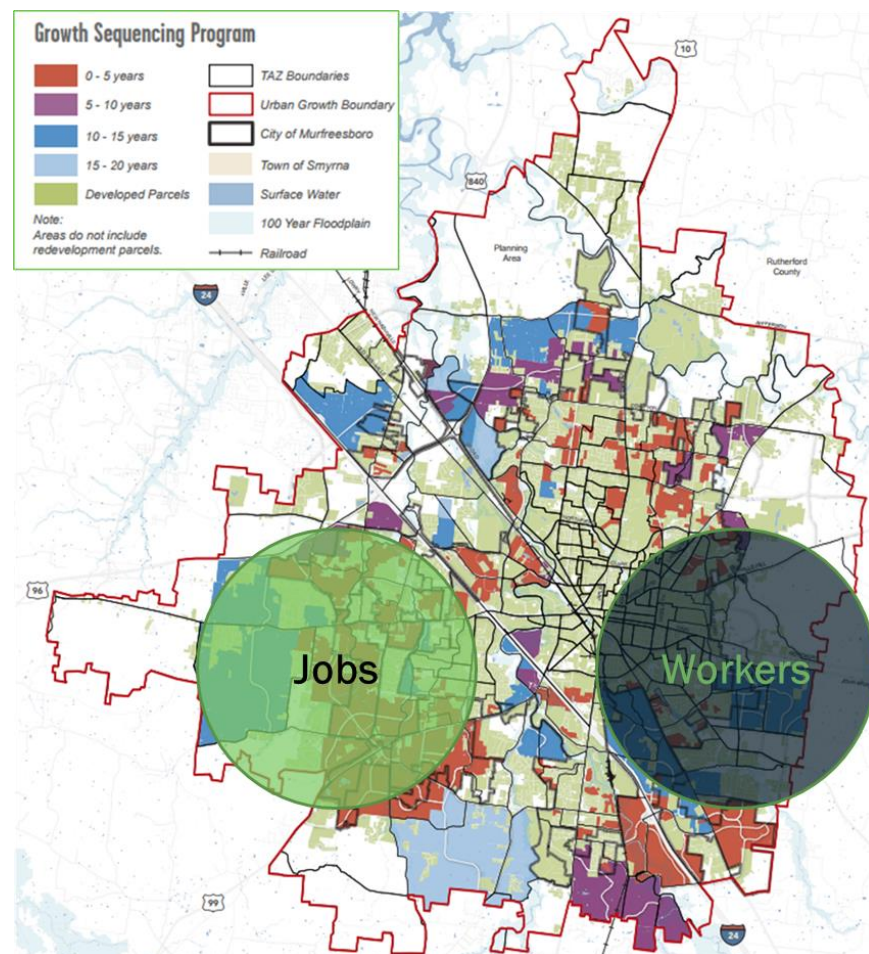
Murfreesboro Today and Tomorrow

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Murfreesboro Today and Tomorrow

- Older housing stock, lower-income workers concentrated in east of city
- Growth and new jobs predominately in the west



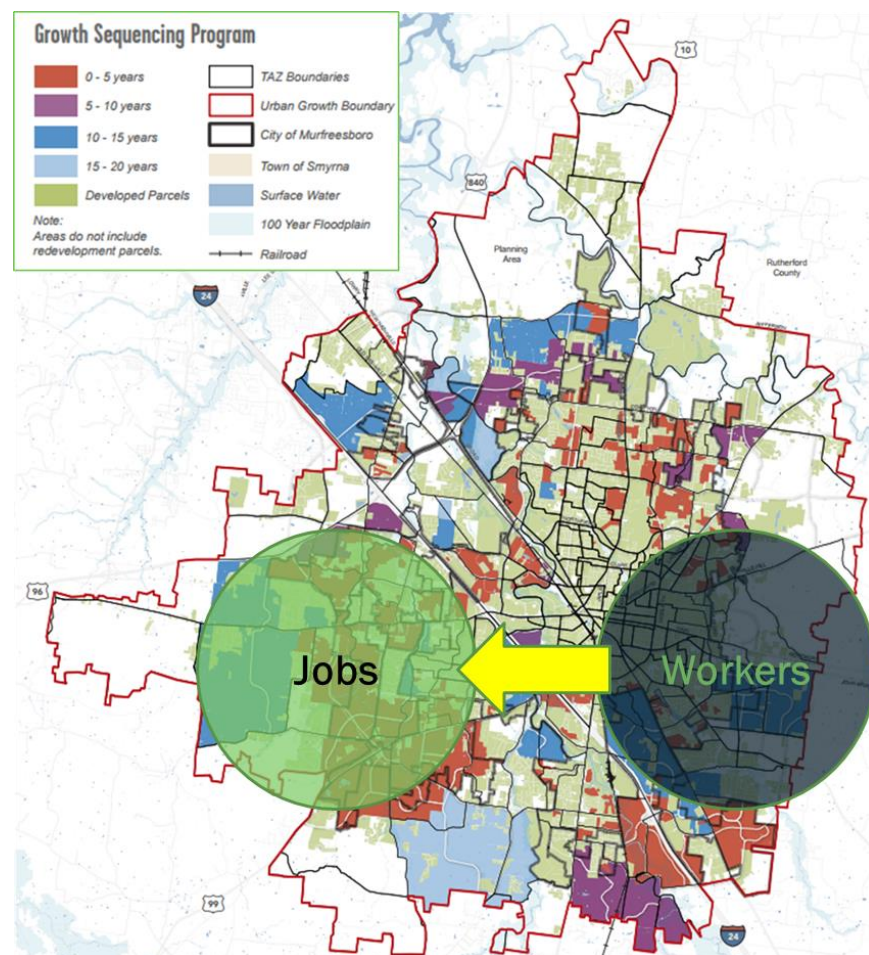
Murfreesboro Today and Tomorrow

- Older housing stock, lower-income workers concentrated in east of city
- Growth and new jobs predominately in the west
- A significant number of these jobs will be low-to-moderate income positions



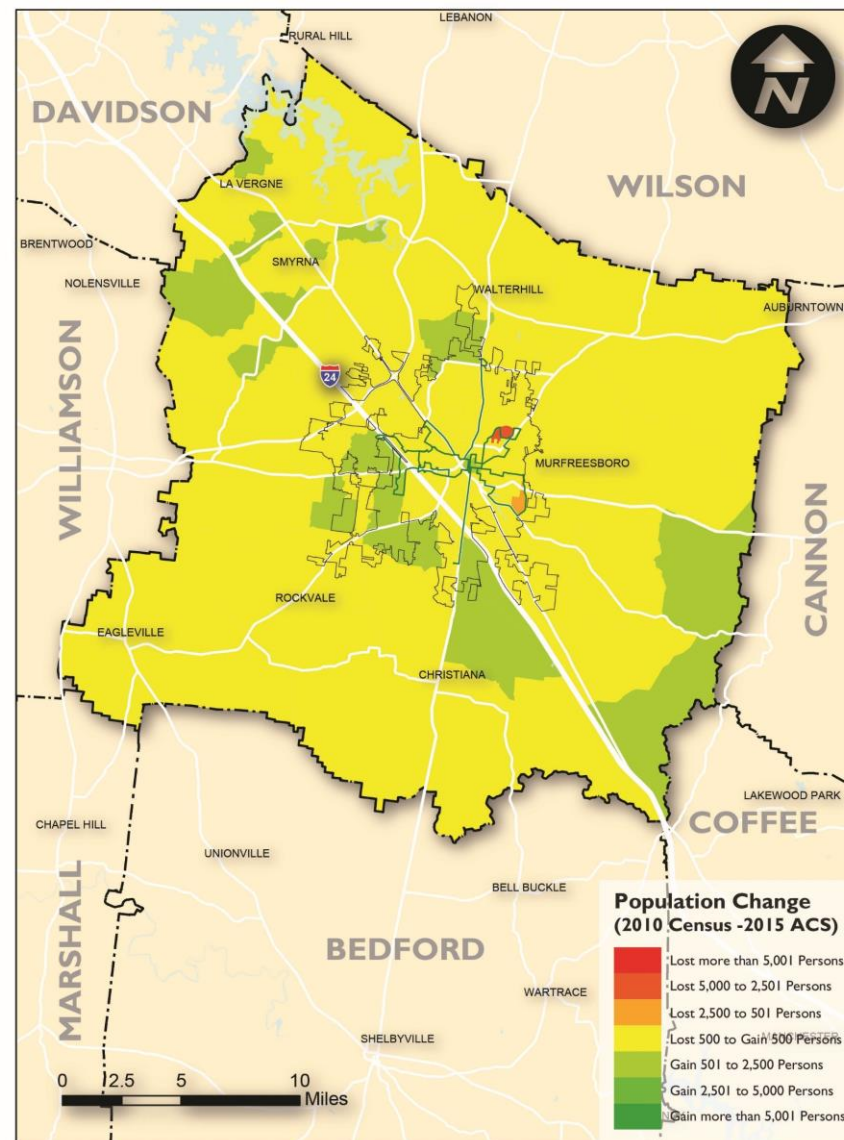
Murfreesboro Today and Tomorrow

- Older housing stock, lower-income workers concentrated in east of city
- Growth and new jobs predominately in the west
- A significant number of these jobs will be low-to-moderate income positions
- Growing mismatch between jobs and the potential employees who need them



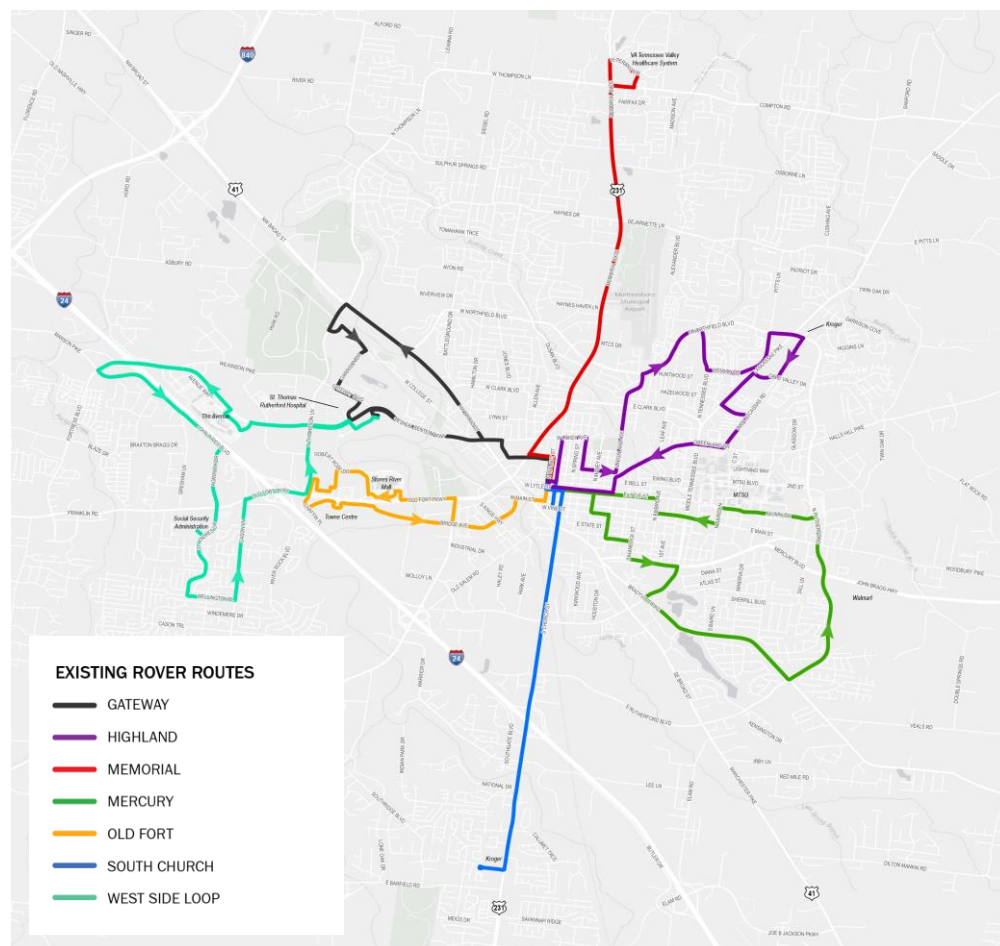
Market Analysis

- Population and employment are growing rapidly, particularly in western areas of Murfreesboro.
- Low income, potentially transit-dependent populations are concentrated in south and east.
- Population and employment density are low, creating challenges in providing efficient transit service.



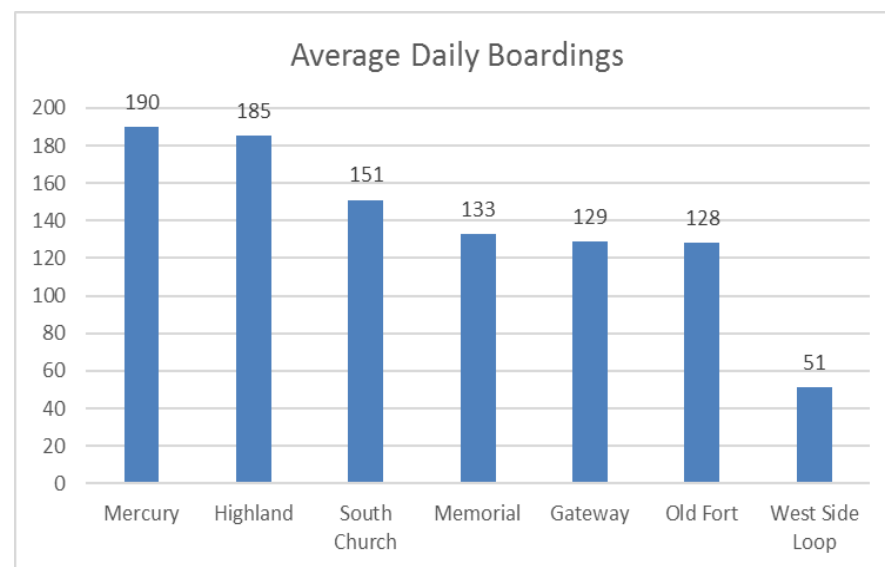
Who Rides Rover Today?

- Rover carries about 1,000 passenger trips per day on seven routes.



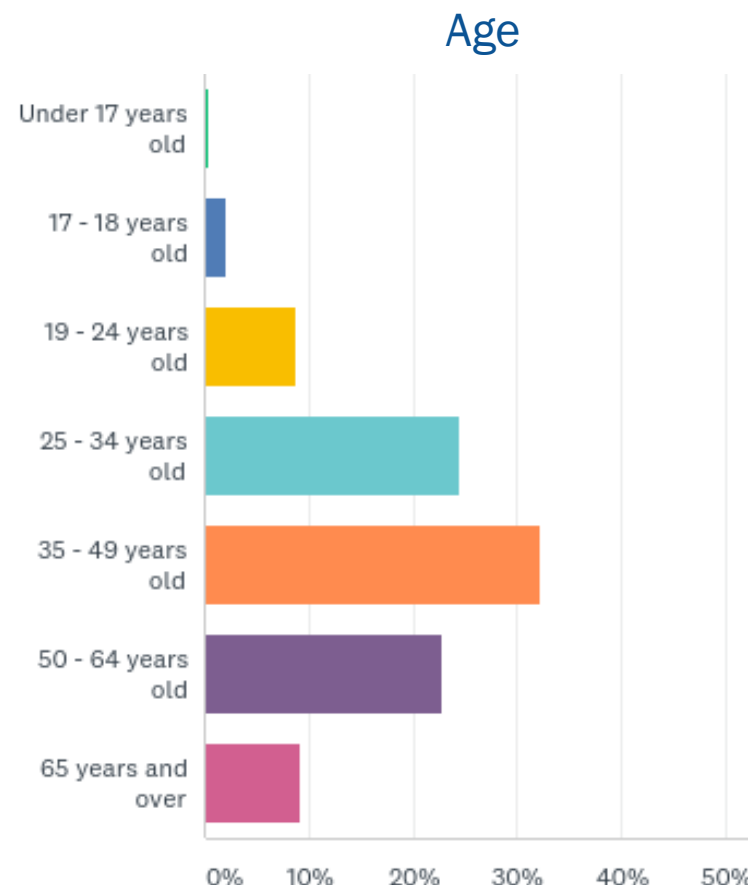
Who Rides Rover Today?

- Rover carries about 1,000 passenger trips per day on seven routes.
- Routes serving east side (Highland and Mercury) have highest ridership and sometimes have standees.
- Ridership on West Side is lower but growing due to new development.



Who Rides Rover Today?

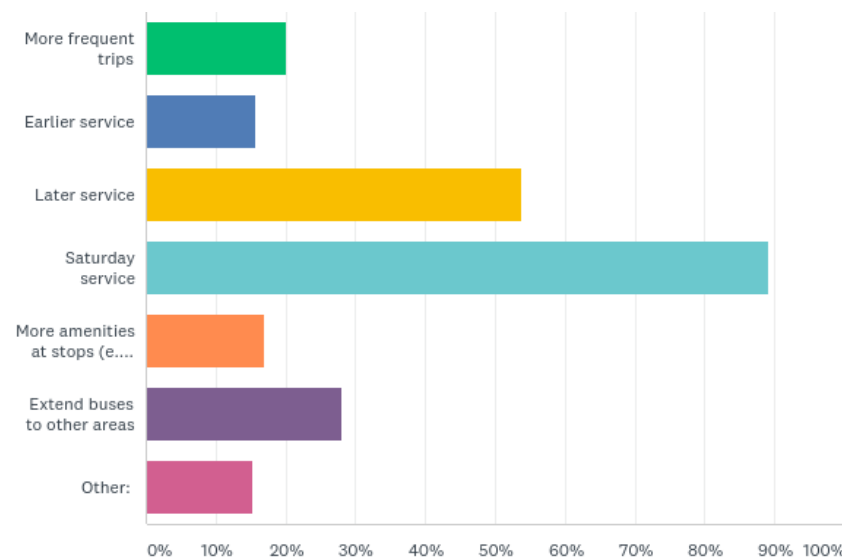
- Most Rover customers (over 80%) are working age (19-64).
- Majority have household incomes below \$20,000 per year.
- Most have no car or can't drive; many would walk were Rover not available.
- Largest number of trips are for work, followed by shopping and medical.
- **Over 60% have missed out on employment opportunities due to lack of transportation.**



What do Riders think of Rover?

- Majority use Rover every day
- Passengers rate Rover very highly, love the drivers, and are grateful for the service.
- Most desired change: Saturday!
- Service to new job opportunities (Butler Drive, Amazon) also a top priority
- Students and young workers are under-represented.

Most Desired Change to Rover



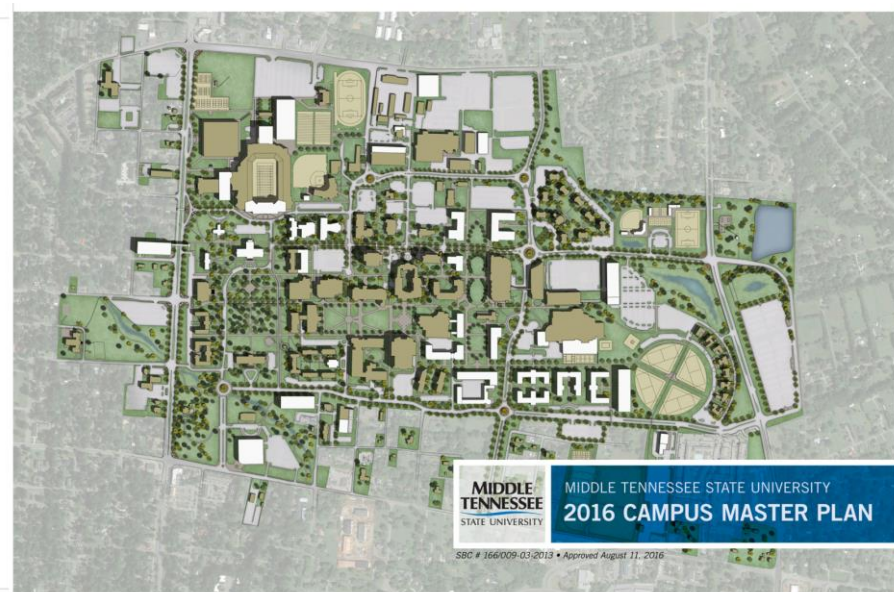
Opportunities for the Future

- Excellent bus drivers, appreciative customers are advantages on which to build
- Fast growing population and employment in Murfreesboro guarantees future growth in transit demand
- Partnership with MTSU could benefit both Rover and the University



MTSU/Rover Partnership Opportunities

- 25,000 students, with plans to expand to 27,000
- More than 3,000 residential students, with plans to grow to 3,800
- Very few students currently use Rover



MTSU/Rover Partnership Opportunities

- Growth in student body and dorms increases size of potential transit market
- Infill development, loss of close surface parking will make transit more attractive to students and staff
- Rover can reduce parking demand, expand off-campus housing options

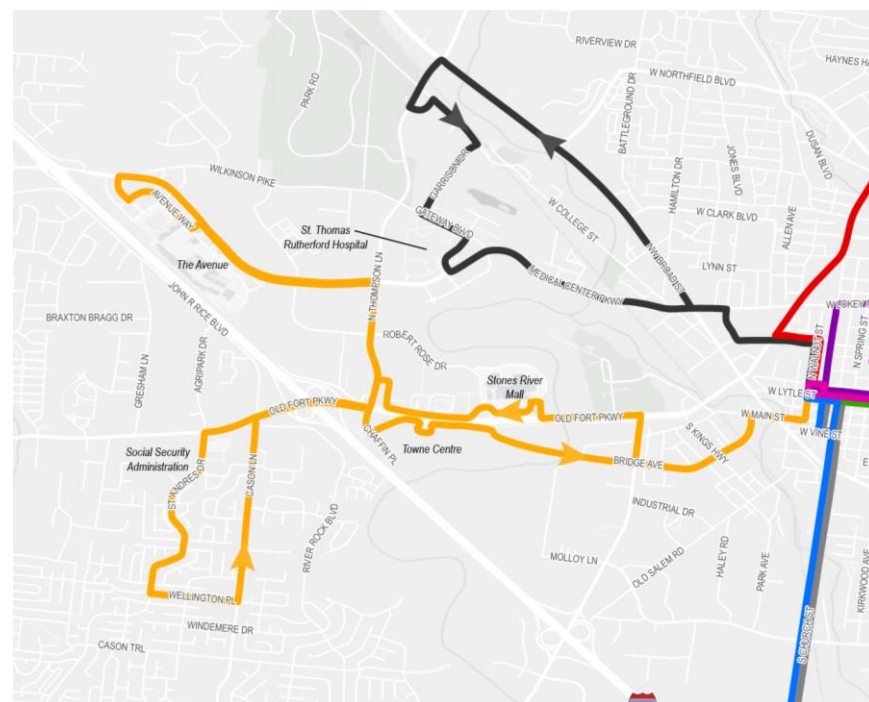


Short Term Recommendations

- Recommendations for the short term include changes that could be implemented as soon as 2018 or over the next few years. These include:
 - Changes to the alignment of existing routes
 - Introduction of new routes
 - Changes to Rover's operating procedures

Short Term Recommendations

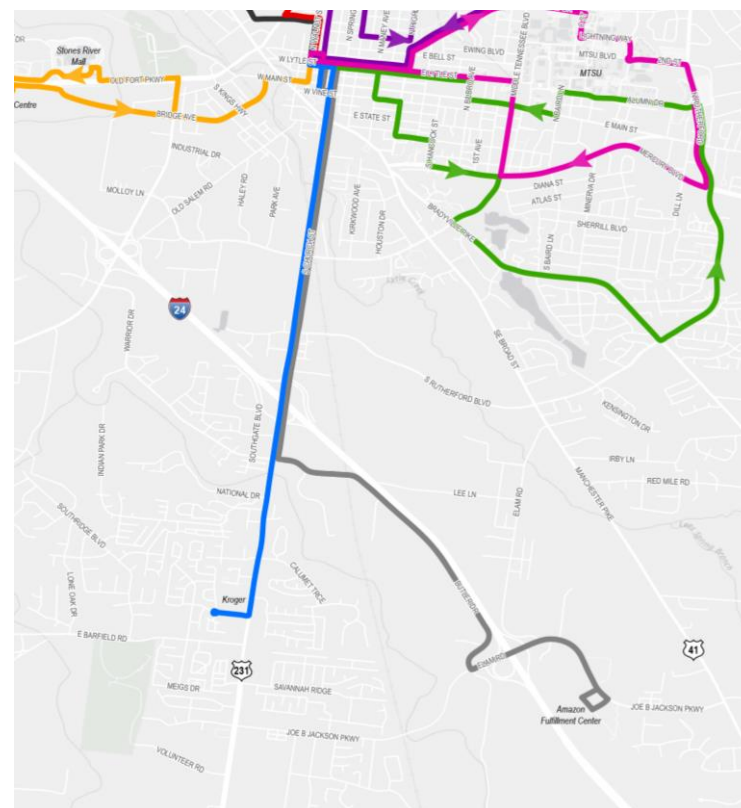
- Combine Old Fort and West Side Loop routes into a single, continuous route
- Provides one-seat ride for customers traveling to West Side Loop areas
- Maintains connections to most important ridership areas of West Side Loop
- Sacrifices some coverage and connection to Gateway route but would likely result in increased ridership





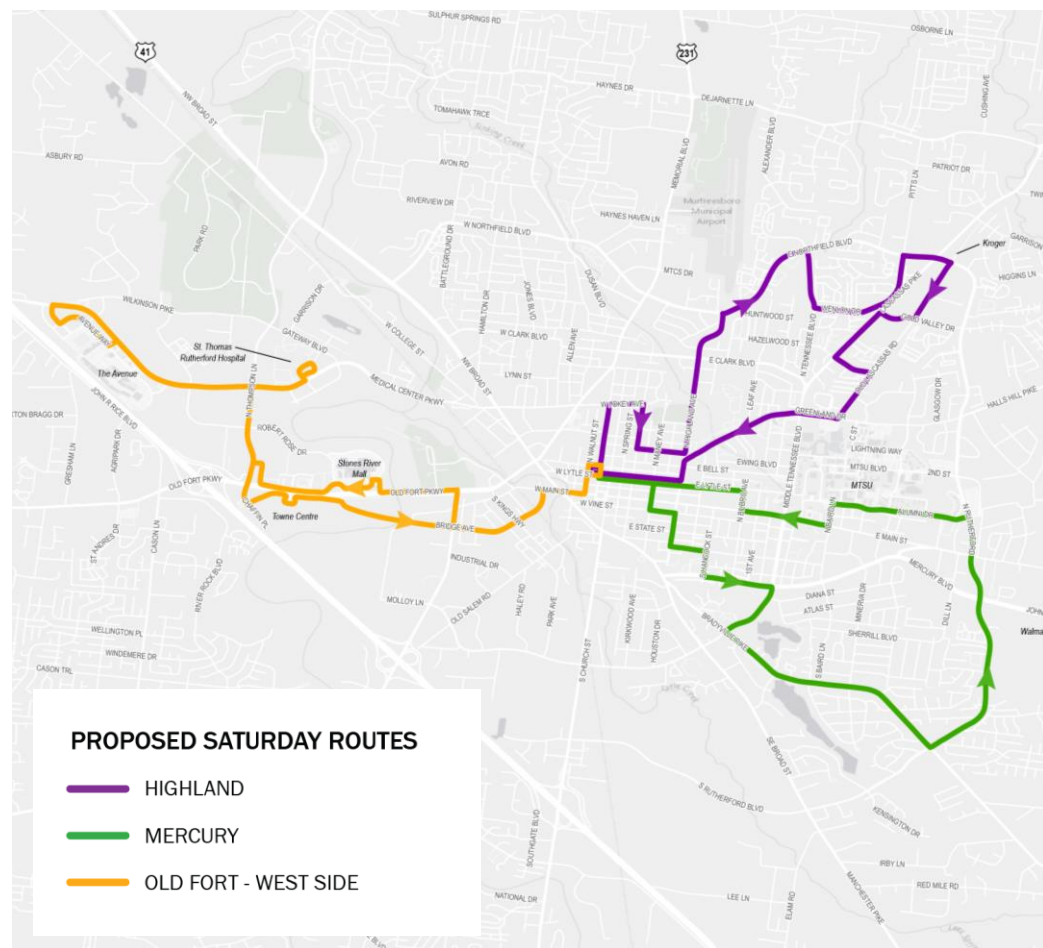
Short Term Recommendations

- Introduce a new express, or “tripper”, route serving the industrial employment centers along Butler Drive and Joe B. Jackson Parkway
- Route would be operated for 2-4 trips daily
- Trip times customized to meet most common shift change times among employers



Short Term Recommendations

- Begin operating three routes on Saturdays:
- Highland
- Mercury
- A modified version of the Old Fort – West Side route that would also serve St. Thomas Rutherford Hospital



Short Term Recommendations

- Establish permanent bus stop locations and eliminate the flag stop system
 - Flag stops are a safety concern
 - Permanent (or fixed) bus stops:
 - Provide operators and passengers identifiable locations where it is safe to get on and off the vehicle
 - Reduce the number of pass-bys
 - Make the system easier to use for potential new riders

Operating Cost and Fleet Estimates

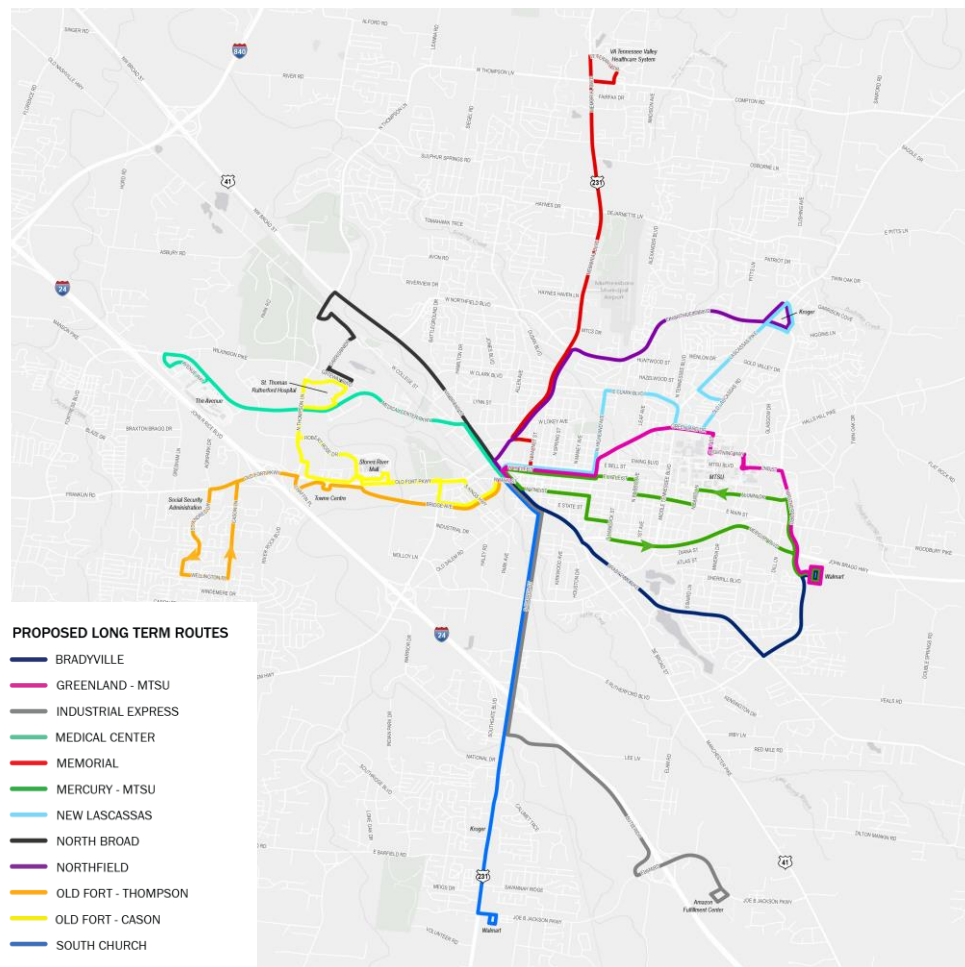
Short Term Route Recommendations	Estimated Annual Operating Cost	Estimated Additional Vehicles
Combine Old Fort and West Side Loop routes	\$0	0
Implement new east side route	\$200,000	1
Implement industrial tripper route	\$100,000	1
Operate 3 routes hourly on Saturdays	\$150,000	0
Sum:	\$450,000	2

Long Term Recommendations

- Recommendations for the long term include changes that could be implemented in the next 2-10 years. These include:
 - Restructuring of many of Rover's existing routes
 - Changes to running times and service frequencies
 - Capital (infrastructure and fleet) recommendations
 - Fare policy recommendations
 - Evening/weekend service recommendations

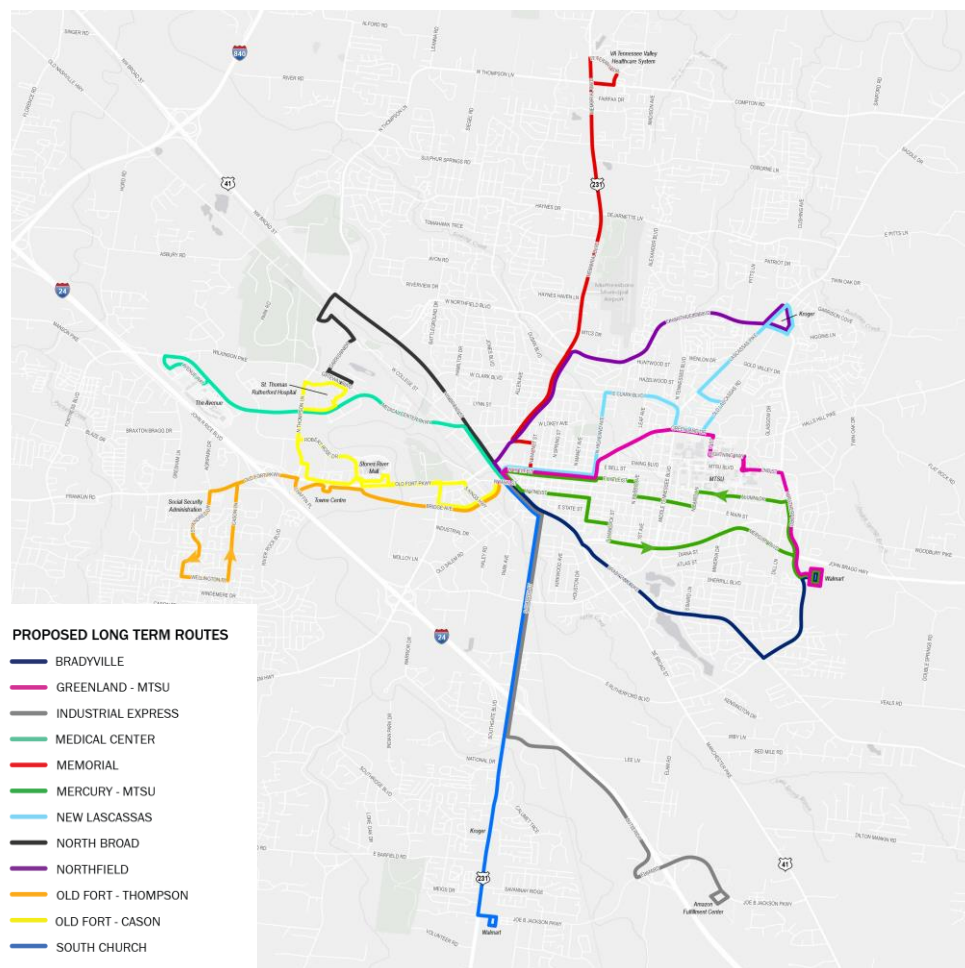
Long Term Recommendations

- Construct a new transit center facility at the proposed site on West Main
- In the long term, all routes will “pulse,” or meet together at the same time, at this location.



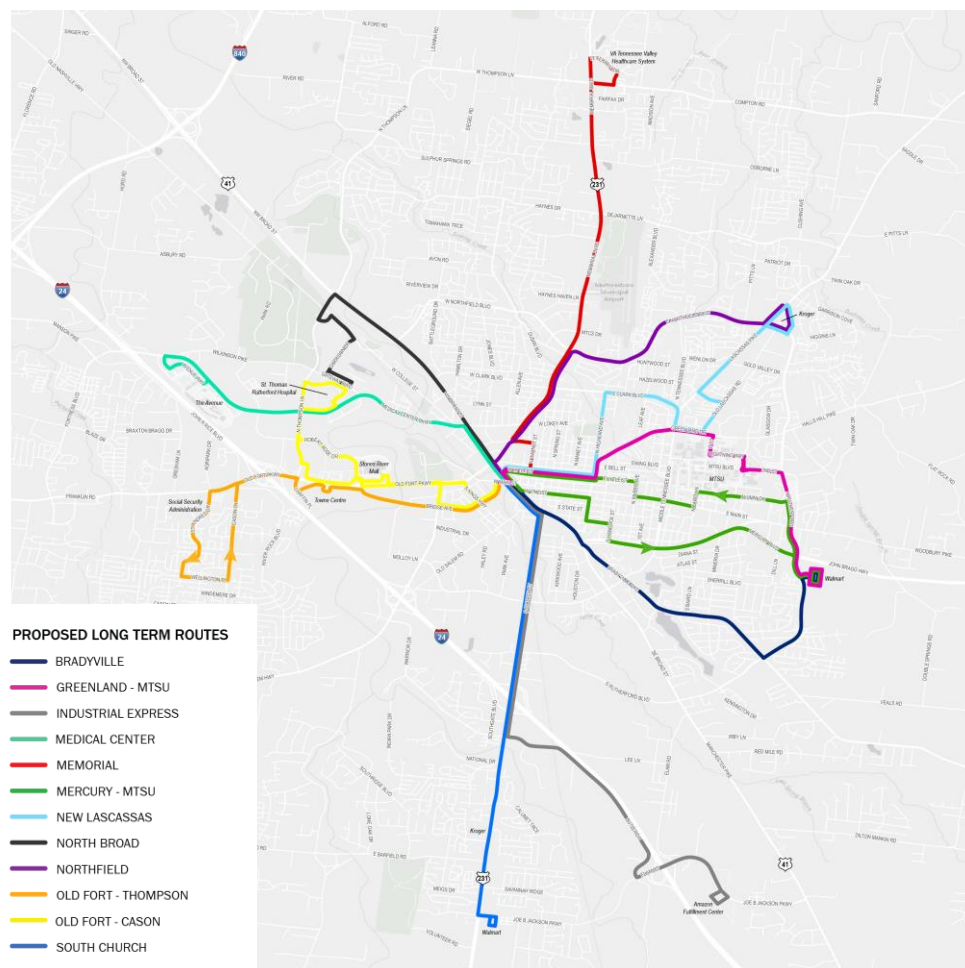
Long Term Recommendations

- Reconfigure most routes in the system to operate bi-directionally, or on the same alignment in the outbound and inbound directions.
- Bi-directional service decreases travel times for passengers, makes the system easier to understand and more convenient to use.



Long Term Recommendations

- Increasing traffic volumes in Murfreesboro and growing ridership will increase the amount of time it takes for a bus to get from A to B.
- Most routes will eventually require 60 minutes to make a round-trip.
- Operate the highest ridership routes in the system every 30 minutes (using two vehicles) and the lower ridership routes hourly.



Long Term Recommendations

- Proposed increases in service will require the purchase of additional vehicles.
- New vehicles should be larger, heavy-duty buses to accommodate growing ridership and reduce long term maintenance costs.



Source: Wikimedia Commons User MJW15, 29 ft. low floor diesel Gillig

Long Term Recommendations

- Evaluate a fare increase to bring Rover's fare closer in line with its peers and the increased level of service being provided
 - Based on peer comparison, fare could be increased to \$1.25
- Provide additional fare media options:
 - Monthly or weekly pass
 - Other products (e.g. smart card or mobile app) made possible through the planned upgrade of fare collection equipment

Operating Cost and Fleet Estimates

Long Term Route Recommendations	Estimated Annual Operating Cost	Estimated Additional Vehicles
Reconfigure service to operate all routes bi-directionally; implement 3 new routes to retain existing coverage (all routes operated hourly on weekdays only)	\$600,000	3
Increase frequency from every 60 minutes to every 30 minutes on 3 to 6 routes on weekdays only	\$600,000 to \$1,200,000	3 to 6
Operate 3 additional routes hourly on Saturdays (6 total)	\$150,000	0
Sum:	\$1,350,000 to \$1,950,000	6 to 9

Long-term estimates assume that short-term improvements are in place

Fare Recommendations

- Evening and weekend service is often not cost-effective to provide, even at very large agencies.
- Demand usually drops significantly after 7PM. Saturday volume is usually about half weekday volume, and Sunday volume is half of Saturday volume.
- However, weekend volumes are growing in many smaller cities, particularly during the midday on Saturdays.

Evening-Weekend Recommendations

- Continue expanding Saturday daytime service to provide hourly service on the highest ridership routes in the system.
- For evening hours and Sundays, coordinate with a local non-profit or other agency to provide discounted rides home from work or school during the hours when Rover does not operate.



Source: Neighborhood Transportation Services in Cedar Rapids, IA

Thank You

- We want to hear to comments on the proposed changes.
- Blank comment cards and a survey are available in paper format and online: www.surveymonkey.com/....